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UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics——Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 6, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

Most of the week ending September 6 was warm and dry, although showers and cooler weather were general during the last two days. All farm work made rapid progress until halted by the rains, at which time harvesting of small grains and haying were reported nearly finished with threshing general. In areas where seeding of winter grains and fall plowing has started, the rains were generally reported beneficial. However, it is still too dry in the extreme northwestern counties where seeding is being delayed and pastures are showing further deterioration. Corn, beans, and sugar beets were helped by the recent hot weather. In northwestern Montana, however, such weather was unfavorable for apples, following dry weather damage earlier in the season. Range grass has cured in most sections with cattle and sheep reported in excellent condition. With ample feed for livestock reported in all except the extreme northwestern counties, there has been little market movement to date.

Harvesting of spring grains has progressed rapidly in all sections of the State and is now mostly completed except in some central, northern and higher mountain valley sections. Reported yields and test weights continue to run very light in northeastern Montana with yields generally poor throughout the eastern third of the State. Elsewhere, as a rule, they are well above those of recent years. The movement of new crops of both winter and spring wheat has taxed elevator facilities in some localities with the peak of the harvest movement still to be reached. However, due to low prices and government loans it is expected that considerable of the grain crop will be stored on farms. Seeding of winter grains continues with moisture conditions quite favorable, except in extreme northeastern Montana where additional moisture is needed. Haying is now largely finished.

Except where damaged by purple top, potatoes generally are showing promise of fair to good yields. Bean harvest has started in the important south-central counties and harvest of corn for forage is underway in the eastern sections. Flax is in good condition except in the eastern and northeastern Montana where grasshoppers and weeds have lowered yields materially. The sugar beet crop is generally favorable, although damaged in Richland County by grasshoppers and in a few western localities by web worms.

Sleeping sickness among horses has decreased. Other livestock are in excellent condition with calves and lambs for most part showing better weights than in any recent year. Abundance of feed, enabling livestock to make continued gains will delay marketings, and due to restocking demands fall shipments will contain a much smaller percentage of breeding stock compared with the drouth movements of the past four seasons.

TEMPERATURE AND PRECIPITATION DATA WEEK ENDING SEPTEMBER 6, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Total Precipitation This Week	Total Precipitation From April 1st to date	Total Precipitation For Corresponding Period in 1937
Billings	88	55	*	0.49	13.45	7.72
Bozeman	83	43	*	0.05	11.13	10.38
Conrad	*	*	*	0.20	9.76#	9.03
Cut Bank	86	44	*	0.68	10.80	8.33
Fort Peck	92	54	*	0.37	8.36	4.34
Glendive	95	49	*	0.27	8.22	6.98
Great Falls	88	46	*	0.37	11.52	6.01
Havre	92	48	86	0.58	10.75#	8.00
HELENA	85	48	73	0.36	11.13	5.20
Kalispell	92	40	86	0.10	4.98#	6.35
Lewistown	85	42	*	0.09	12.69	7.74
Malta	93	50	*	0.75	10.15	6.79
Miles City	88	56	66	0.08	7.75	6.74
Missoula	92	44	70	0.03	7.88	3.88
Poplar	96	49	*	0.14	10.47#	5.33
Stanford	*	*	*	0.14	13.95	7.81
AVERAGE	--	--	--	0.29	10.19	6.91

*No Data.

Corrected to agree with August total.

Series - 1938 - No. 23
Helena, Montana
September 7, 1938

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bur. of Agr. Economics.

The following summaries of crop conditions for the week ending September 3, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Light to heavy rains in different sections, temperatures warmer. Harvesting of grain and pea crops continuing with good yields. Harvesting second crop of alfalfa started. Lambs still inactive, no inquiries for for yearlings to date, few new cases of sleeping sickness in horses.

BIG HORN: Scattered showers on Thursday, otherwise warm and dry weather prevailed. Harvesting of both winter and spring wheat practically completed, some threshing of irrigated grain yet to be done. Splendid growing conditions for irrigated crops such as sugar beets, corn and beans, all of which are making splendid progress. Potato crop badly affected with purple top which will reduce production materially. Feed crops, such as cane, sudan and other annual crops are being cut. Range in splendid condition, grass ripening and cattle making good gains. Several carloads of cattle shipped out during week. Sleeping sickness still prevailing among horses of county. Labor ample. Cricket control work closing down.

BLAINE: No precipitation, clear sunshiny days and normal temperatures. Harvesting of small grains on dry land about 98% completed. Second cutting alfalfa well under way. Sugar beets showing excellent growth. Migratory grasshoppers now in all parts of county in sufficient numbers to cause concern for 1939 crop. Livestock in good condition, no movement to market as yet.

CARBON: Temperatures in Red Lodge area ranged from 46° to 82° with rains reported over most of county end of week. Bean cutting being completed in Clarks Fork Valley area. Beets in good condition as a whole. Grain threshing near completion, many grain fields report 40 to 50 bushels to the acre in dryland sections. Second cutting of hay being completed in Red Lodge and Luther area. Weed spraying in progress. Livestock condition good, sleeping sickness still prevailing.

CASCADE: Precipitation 1.04 inches in August, brings county total for year so far to 12.23 inches. Few scattered showers fore part of week continued to delay harvest. Latter part of week clear with warm sunny days and cool nights. Yields of winter wheat continue to average between 30-40 bushels per acre, with some few spotted areas reporting as high as 50 bushels. Spring wheat yields disappointing. Crops on irrigated land in excellent condition and indications are for good yields on all crops excepting potatoes. Livestock in excellent condition with exception of horses although sleeping sickness outbreak has subsided somewhat with advent of cooler weather. Labor about normal.

CHOUTEAU: Clear, still weather has prevailed. Winter wheat harvest virtually completed, 25% of spring wheat combining incomplete. Much of wheat harvested remains in possession of farmers. Much remains on the farm. Seeding of winter wheat begun in Waltham and Highwood areas. Livestock and labor situations unchanged. Cricket control work completed.

CUSTER - POWDER RIVER: First of week warm, declining temperatures latter part. Light shower in south country. Harvest of all grain and hay crops finished. Some dry land corn being cut for fodder with yields only fair. Water in Tongue River low, but sufficient for sugar beets and other late irrigation crops. Cattle moving to market with weights mostly above average. Some trading in lambs but no deliveries to date. Feed and water still plentiful on ranges. Winter pastures excellent.

DANIELS: No precipitation. Weather generally warmer than week previous enabling some of the late feed crops and corn fields to mature. Combining practically completed. Several fields will remain unharvested due to rust and hoppers. Wheat averaging from 3 to 7 bushels per acre. Grasshopper survey indicates 3 to 5 adult hoppers per square yard over entire county. Indications are for heavy egg deposit. Livestock remains in good condition with sufficient feed being put up for winter. Nearly all farmers will need employment to carry them through the winter. Many farmers heretofore independent now seeking government relief jobs.

DAWSON: Weather seasonal. No change in crop conditions. Grass drying and stock doing well. Sleeping sickness in horses abating.

FALLON - CARTER: Fair growing conditions. No change from past week. Harvest all completed. Winter wheat seeding plans being made, condition for winter wheat seeding poor. Livestock in fair condition.

(Cont'd on Page 2.)

FERGUS: Ideal harvesting weather, hot and dry during week. Combining probably 75% completed. Threshing of shocked grain well under way. Most grain grading No. 1. More grain shocked this year, thus adding much straw to feed reserves. Very little stock shipped. All stock in excellent condition, feed and water ample. 777 Crop Insurance applications have been filed to date. Considerable wheat in crop loans. First ones now in process of completion in county office.

GALLATIN: Slightly cooler, somewhat windy, partly cloudy, no precipitation. Combining winter wheat practically complete, and well along on spring wheat. Threshing of both spring and winter wheat continues. Seeding of winter wheat well under way.

GARFIELD - PETROLEUM: Weather continues seasonal. No precipitation. Very warm days, cool nights. Threshing continues. Combining practically complete. Yield same as previously reported. Corn maturing slowly. Other crop conditions unchanged. Few reports of sheep and cattle exchanging hands within the area are reported. Very little movement to market. Sleeping sickness in horses still reported but apparently is subsiding.

GLACIER: No precipitation. Days quite warm. No reports received of low temperatures except in higher western portion of county. Warm dry weather ideal for grain. Crops maturing rapidly but there is still slight dange of frost damage. Crops vary in yields from 15 to 45 bushels. Grain generally of good grade, protein generally low. Some second crop alfalfa being baled and some not yet cut. Mustard crop being harvested or about to be harvested with fair yields reported. Prairies quite dry and fire hazards prevail. Reports received during week of infestations of black crickets throughout eastern portion of county. Stock in excellent shape with few head being shipped out to be replaced with purebreds.

HILL: No precipitation. Ideal harvest weather. Considerable amount of grain cut with binders and headed, so it will be some time before threshing is completed. Still some wheat to be combined in western and northwestern part of county. No damage reported from insects. Ranges in good condition. Livestock in excellent condition. Labor balanced.

JUDITH BASIN: No precipitation. Temperatures high during day and moderate at night. Wind moderate. No frosts as yet. Some winter wheat still to be harvested and most of spring grains have not been threshed. Yields excellent. Livestock in excellent condition with feed plentiful. Sufficient hay on hand for winter feed with more to be put up. Labor balanced.

LAKE: No precipitation. Hot days, cool nights. Grain harvesting nearly complete. Harvesting of red clover and alfalfa for seed in full swing. Pastures getting short. Grasshoppers and crickets laying eggs with indications for heavy infestation in 1939. Livestock in good condition.

LEWIS & CLARK - BROADWATER: Relatively warm weather with good maturing and harvesting conditions. Crop conditions generally good. Potatoes during all of season have grown and matured slowly. Considerable threshing being done. Combining of winter wheat well along to completion. All haying almost completed with second crop of alfalfa about half in stack. Sugar beets progressing satisfactorily with harvesting due to start last of September. Sleeping sickness in horses seems to be lessening somewhat although there are still several cases in both counties. Other stock in usual good condition. Grasshoppers scattered over counties, but no appreciable damage being done.

MADISON - JEFFERSON: Days very warm, nights cool. Showers Wednesday night. Growing conditions good. Threshing about half finished. Grain production about normal, pea production lower than expected. Second cutting of alfalfa hay well under way. Pastures in excellent condition. Sleeping sickness still prevalent in both counties. Loss heavy. Cattle in good condition.

MEAGHER: No precipitation. Weather warmer than week previous. Growing season about ended. Grain ripened well past week. Good progress on harvesting and threshing. Second cutting alfalfa being stacked with fair to good yield reported. Range feed about cured, in very good condition. Livestock condition excellent, excepting some sheepmen report range feed too coarse for lambs. Country buying activity resumed in both cattle and lambs. Mixed lambs at about 7 cents. No excess supply of labor.

MISSOULA: Seasonal weather, warm, bright, with light showers. Small grain harvest practically completed. Threshing still in progress but nearing completion. Grain yields generally good. Some haying in progress. Sugar beets and potatoes doing well. Early apples coming on market. Higher ranges generally infair to good condition. Lower ranges and pastures dry. Cattle generally in good condition.

MUSSELSHELL - GOLDEN VALLEY: No rain, cool mornings and evenings. Harvest operations nearing completion. Much grain not

(Cont'd on Page 3.)

threshed due to few grain separators in operation. No winter wheat seeded yet, but will start soon. Livestock in good condition. Plenty of feed to care for stock through winter.

PARK: Generallycool weather for season, maturing grain and grass rapidly. Binding, combining and threshing under way in all parts of county with good yields reported. Potato crop below normal. Winter wheat seeding under way with earliest of it up. Livestock in excellent condition, with few shipments to market. Between 3 to 400 cases of sleeping sickness in horses in county. Plenty of labor for harvest and haying. Grasshoppers damaging early seeded winter wheat. Some poisoning attempted.

PHILLIPS: No precipitation. Ideal weather for harvesting. No frost reported to date. Grain harvest practically complete with exception of some shocked grain being threshed. Yields vary from 3 to 30 bushels according to reports, also wide variations in test weight. About average sugar beet crop in prospect. Large supply of both alfalfa and bluejoint jay. Corn being damaged by grasshoppers. Extremely light alfalfa seed crop. Crested wheatgrass seed good on acreage harvested. Grasshopper infestation general. Range and livestock in excellent condition. Some demand for feeder lambs. Demand for cattle for restocking. Labor balanced.

PONDERA: Bright and hot most of week. Cool breezes Saturday. Heavy dews in mornings. Returns from summer fallow on Ledger Bench indicate about a 35 bushel average. In Brady region wheat from summer fallow indicates return of from 32 or 33 bushels to as high as 45, this carrying between 14.5 and 15.5% protein and testing from 57 to 61 pounds. Combine harvesting well along, but considerable grain is in the shock and will require at least three weeks of threshing. Mustard yields ranging from 800 to 1,100 pounds per acre. Yields of horn barley on dry land running 76 to 80 bushels. No reports on Trebil. No report on oats. Crested Wheatgrass in rows 42 inch spacings, 4 year old stand, running about 400 pounds of green seed. Broadcast fields not averaging as high. Grass is maturing and there will be an abundance of winter feed. Lambs practically all contracted for at about 6½ cents and some holding for 7 cents. Wool all sold ranging in price from 17 cents to 20 cents.

PRAIRIE: No precipitation, Growing conditions satisfactory for ripening crops. Harvest nearly completed. Yields not up to expectations due to grasshoppers and rust damage. Ranchers obtaining western wheatgrass hay, which is reported best in years. Livestock in good condition. One operator reports losing 4 horses out of 7 owned from sleeping sickness.

RICHLAND: Good growing weather for corn throughout week, with no precipitation. Corn has begun to mature quite rapidly and many growers now cutting corn and filling trench silos. Large number of new trench silos constructed, particularly in irrigated valley, this year. Harvesting of small grains still in progress in dry land area although practically all grain has been cut with low yields as previously reported ranging around 5 or 6 bushels. Most growers completing putting up second cutting alfalfa hay. No marketing of livestock in county to date. Some demand for feeder pigs. Surplus of labor.

ROOSEVELT: Weather warmer, no precipitation. Favorable for maturing corn and threshing. Threshing about finished in most cases. Later wheat threshed light in weight and poor in yield mainly due to damage from rust. County average yield of spring wheat estimated at not over 6 bushels. Some harvesting of corn and cane, though most corn being left to mature further. Yields of all feed crops heavy, except where severely damaged by grasshoppers. Some demand for winter wheat seed. No change in livestock situation.

ROSEBUD: Weather normal for season. Nights cool but no frost reported. Harvesting completed. Corn and truck crops late. Winter wheat seeding getting under way. Light crop of alfalfa seed being harvested. Sleeping sickness subsiding. Epidemic of swine influenza is in Treasure County.

SANDERS: No precipitation. Clear, hot and very dry. Growing conditions poor. Irrigation water very low. Crops well advanced. Second cutting hay in stack. Some clover seed threshed with good yield. Alfalfa seed harvest just starting with evidence of good yields. Livestock in good condition. Heavy marketing of fat lambs. Some marketing of grass fat cattle starting.

SHERIDAN: No precipitation, weather continues warm. Threshing operations nearing completion. Yields disappointing in most areas. No change in livestock or labor situation.

SWEETGRASS: Weather ideal for maturing late spring grains and second cutting alfalfa. No precipitation. All grains except late spring grains are in shock. Threshing under way throughout county. Heavy yields reported.

(Cont'd on Page 4.)

Some danger of late grains being frosted, as slight or near frosts are evident. Livestock in excellent condition. Labor situation unchanged.

TETON: Ideal harvesting weather. Wheat harvest progressing in fine shape, practically completed east of Dutton and about 50% completed in central part of county, just well started in Choteau-Farmington-Pendroy area. Yields in central and Farmington-Pendroy areas running considerably better than rest of county. Spring wheat yields running 25 to 40 bushels. In Farmington-Pendroy area several fields of winter wheat yielded exceptionally high, 50-60 bushels. Most farmers not selling wheat. All available farm storage will be filled to capacity and balance will be shipped. Sleeping sickness in horses apparently subsiding. Some sick cattle being watched for sleeping sickness symptons. Most cattle in southern part of county vaccinated for hemorrhagic septicimia.

TOOLE: Weather warm entire week. One hail storm northeast of Shelby, but only 200 acres severely damaged. Harvesting progressing very rapidly, about 60% done. Yields good throughout entire county, appears that average yield will be around 25 bushels. All livestock in excellent condition. Feed supplies sufficient for two years due to bountiful yields. In many instances sufficient wild hay has been put up to last at least two years.

VALLEY: Clear, calm and hot, no precipitation. Harvesting of small grains practically completed. Beets fair to good, expect to start harvesting middle of September. Livestock in good condition. No labor needed. Grasshoppers dying off.

WHEATLAND: No precipitation. Days hot and clear, cool nights. Harvesting of spring wheat in full swing. Sleeping sickness in horses subsided to certain extent with no loss reported this week.

WIBAUX: Very hot, no precipitation. Threshing about completed. Yields very disappointing. 15 applications for crop insurance on winter wheat up to September 1st. Interest in wheat loans increasing. Indications are for some increase in seeding of winter wheat. Sleeping sickness decreasing. Loss of about 100 horses in Wibaux County. Corn and millet improved some since recent rains. Livestock in very good condition. Sheep doing well on wheat fields. Up to 10 or 15 bushels of wheat per acre laying on the ground in some fields.

YELLOWSTONE: Precipitation .14 inch. Warm weather, cool nights, with few local showers. Threshing of spring grains practically completed. Bean harvest well under way in most parts of county. Some winter wheat being seeded. Beets continue to look good with excellent growing conditions and relatively small amount of disease present. Livestock in good condition with excellent range prevailing.

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Jay G. Diamond, Sr. Agr. Statistician.
T. J. Kuzelka, Jr. Agr. Statistician.

Helena, Montana
September 7, 1938

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics——Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 13, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

With the exception of southcentral, southeastern and parts of central Montana, most of the State received moderate to heavy showers during the first half of the week ending September 13th. Almost an inch fell in the Flathead Valley where it greatly improved soils for fall plowing and seeding. In the Milk River Valley amounts ranged from one to two inches with amounts upwards of an inch reported in northcentral and northeastern Montana. The showers were light in the Gallatin and upper Yellowstone Valleys, and in parts of southeastern Montana and central Montana. Hail accompanied the showers in northcentral and eastern Montana where damage to unharvested crops was reported from scattered localities. The first part of the week was quite cool and the latter part sunshiny and warm. No killing frosts have as yet occurred.

Harvesting and threshing continued with but little interruption in the Gallatin Valley, the southern half of the central counties and in the southern tier of counties. Over the northern half of the State, these operations were delayed by the rains but were resumed during the closing days of the week. Good to excellent yields of grain are reported from the later harvesting areas in central, southcentral and southwestern counties. Haying operations are now largely completed except for third crops of alfalfa and some late wild hay cuttings. Harvest of beans has progressed rapidly with important Carbon County reporting yields as high as 20 bags per acre on irrigated land. Sugar beets are making rapid development in the Milk River Valley and are reported as being about two week from harvest in the upper Yellowstone Valley. Corn harvest for forage and fodder continues in the eastern counties. Some early potatoes have been dug but the bulk of the late crop is still growing in the absence of any killing frosts to date.

Winter wheat seeding continues in northcentral, central and southcentral, and southeastern counties where soil conditions have been generally favorable as a result of the growing season's rainfall. In extreme northwestern Montana the recent rains were highly beneficial for fall seeding and plowing.

Prospects for fall grass have improved as a result of the rains over the greater part of the State. Condition of both cattle and sheep continue to be reported as excellent. Market movements are not expected to get generally underway until well along toward the end of the month, although some early shipments of both cattle and sheep have occurred. Sleeping sickness among horses continues to decrease.

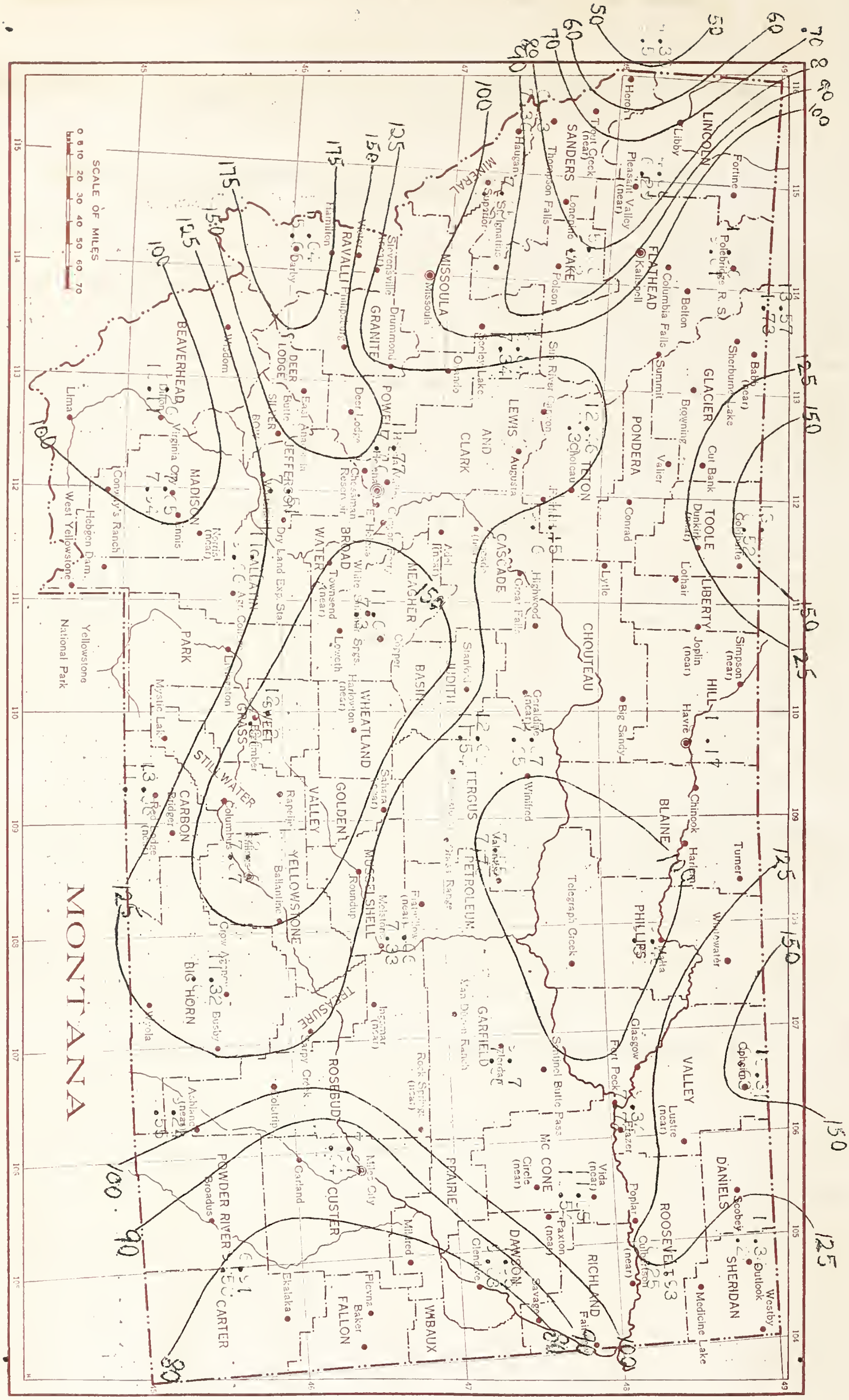
TEMPERATURE AND PRECIPITATION DATA WEEK ENDING SEPTEMBER 13, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Total Precipitation This Week	Total Precipitation From April 1st to date	Total Precipitation For Corresponding Period in 1937
Billings	82	48	*	0.07	13.52	7.79
Bozeman	79	39	*	0.01	11.14	10.55
Conrad	*	*	*	0.45	10.21	9.03
Cut Bank	77	39	*	0.50	11.30	8.33
Fort Peck	80	49	*	0.92	9.28	4.35
Glendive	82	45	*	0.63	8.85	6.98
Great Falls	79	43	*	0.38	11.90	6.01
Havre	82	46	66	0.74	11.49	8.00
HELENA	78	44	66	0.35	11.48	5.22
Kalispell	78	42	50	0.96	5 94	6.35
Lewistonw	80	35	*	0.11	12.80	7.83
Malta	81	46	*	2.08	12.23	6.79
Miles City	82	48	56	0.26	8.01	6.79
Missoula	84	44	56	0.43	8.31	3.88
Poplar	82	44	*	0.96	11.43	5.33
Stanford	*	*	*	0.09	14.04	8.14
AVERAGE	--	--	--	0.56	10.75	6.96

*No Data.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bur. of Agr. Economics.

Series - 1938 - No. 24
Helena, Montana
September 13, 1938



This map shows the percentage of normal precipitation that has occurred in Montana during the first five months, April to August, inclusive, of the 1938 crop growing season.

The upper of each typed pair of figures indicates the actual amount of precipitation that occurred in that respective area during the period April to August; the lower figure of the pair indicates the normal precipitation for the same period.

Percentage lines are drawn for each 10 percent up to 100 per cent, and for each additional 25 per cent above 100.

U.S. Weather Bureau
Helena, Montana.

The following summaries of crop conditions for the week ending September 10, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Showers throughout county, light frosts in higher valleys. Harvesting of grain and pea crops continued with good yields reported. Second crop alfalfa being harvested. No activity in lambs or sheep. Sleeping sickness in horses still prevailing.

Big Horn: General rain over county, accompanied by hail which did some damage to beets, corn, beans and gardens. Harvesting and threshing about done. Winter wheat seeding under way. Second crop hay up and third crop coming on. Beets and corn making splendid progress. Beet harvest to start about first of October. Range in good condition, livestock accordingly. Sleeping sickness in horses subsiding. Labor ample.

BLAINE: General rain on Monday evening with considerable hail south of Chinook and north of Lohman which did considerable damage to crops not harvested. Approximately .75 inch rain fell on Wednesday night in central part of county. Threshing and combining delayed on account of weather conditions. Sugar beet crop making rapid development and indications are that satisfactory crop will be harvested. Livestock and range in good condition.

CARBON: Cooler weather prevailed, some rain reported in most sections. Harvesting and threshing about 75% completed. Average yields from 25 to 40 bushels in fall wheat sections, few reports of 50 and 60 bushel yields under abnormal rainfall. Lower yields due to insect pests and hail damge. Spring wheat yields, majority of cases on irrigated land, from 35 to 40 bushels, with 25 to 35 bushels in some sections damaged by rust. Many farmers storing grain in farm granaries and local elevators being filled to capacity. Yield of barley and oats generally very good. Bean harvest well under way, threshing started. Beans averaging 20 sacks per acre in irrigated section, no reports from dryland to date. Livestock conditions good. Good supply of hay and feed grains. Weed spraying with county owned sprayer in progress.

CASCADE: Scattered showers throughout week have hampered harvesting, but moisture has benefitted range, and reduced fire hazards, and made for ideal germination conditions for winter wheat. Seeding of winter wheat well under way and conditions ideal for securing good stand. Crops on irrigated land in excellent condition with potato harvest started and sugar beets will be ready to dig in about two weeks. Livestock in excellent condition. Most lambs sold. Demand strong for feeder calves and stock cattle supply limited. Labor normal.

CHOUTEAU: Cool, cloudy, rain in most sections. Harvest completed except in isolated areas. Rains have cut grade of wheat by reducing test weight and bleaching. Winter wheat seeding under way. Sufficient supply of feed will result in more fattening of livestock on the farm. Slackening of labor demand due to completion of harvesting.

CUSTER - POWDER RIVER: Cloudy and cool, showers and light rains. Harvest of all hay and grain crops now complete. Light scattered crop of alfalfa seed now being cut in few localities. Yields expected to be fair to good. Sugar beets continue good growth with irrigation water supply ample since recent rains. Potato crop expected to be very light due to purple top damage. Cattle moving to market with weights heavier than average and returns satisfactory. Heavy shipments expected in next two weeks. First deliveries of rams expected soon. All stock in excellent shape for winter with plenty of feed and grass on ranges and hay in the stack.

(Cont'd on Page 2.)

DANIELS: Approximately one inch precipitation, evenly distributed over county. Cloudy and rainy all week, causing some delay in harvesting of few late crops. No heavy frosts reported as yet. Few farmers planting winter wheat and rye. No change in spring wheat situation from previous reports. Livestock remains in good condition. Many farmers awaiting jobs on WPA.

DAWSON: Approximately .9 inch rain, weather generally cool and damp. Harvesting at a halt on account of rain, otherwise not much change from last week. Livestock in good shape with ample feed and water.

FALLON - CARTER: Precipitation 2.34 inch. Growing conditions fair. Due to rains, conditions appear very favorable for fall seeding of grains. Reports that due to damp rainy weather, some grain starting to sprout in header stacks. Livestock conditions fair.

FERGUS: Wet and cold most of week. Harvesting well under way, many through combining. Threshing in full swing. Hail from Coffee Creek to Denton to Winifred, damaged several fields still standing. Largest stones measured 2.75 inches in diameter. Moisture which fell with hail will be of some benefit in starting winter wheat. More livestock being shipped into county than out to market. Some wether lambs to be shipped later this month. Seven cars cattle out during week. Hardly one car going out this year compared with trainloads in past two years. All stock in good condition, feed plentiful.

FLATHEAD: Cloudy with good general rains throughout county. Threshing and combining well advanced with yields averaging lower than last year. Some frosted wheat delivered, but otherwise wheat is of good quality. Recent moisture will make conditions more favorable for fall seeding of winter wheat, but will not be up to normal. Potato crop will be very light. Livestock in good condition. Labor adequate.

GALLATIN: Somewhat cooler, frost in higher areas. Few local showers. Grain harvest continues with threshing of winter and spring wheat, and cutting of oats and barley. Last of hay crops being stacked. Seeding of winter wheat continues on increased scale. Moisture somewhat low in summer fallow.

MARFIELD - PETROLEUM: General precipitation in moderate amounts, with scattered heavy showers. Weather generally cool. Cloudy and partly cloudy all week. Harvesting of small grains 75% complete with threshing of some shocked fields remaining to be done. Corn harvesting for fodder largely under way. Additional moisture will increase winter wheat seedings and make conditions appear more favorable. Livestock conditions continue very good. Recent moisture will improve fall range and pasture. Some continued movement of stock between operators within the area. Very slight other movement of market stock.

GLACIER: Intermittent rains all week. Farming operations practically at standstill, including threshing and haying. About one inch of rain. Pastures and range becoming green again. Some small areas where grasshoppers congregate to lay eggs being poisoned. Some reports of exceptionally large numbers of black crickets in eastern portion of county. Livestock in excellent shape, some movement to market.

HILL: Precipitation 1.47 inch. Rain scattered throughout week has slowed up harvesting and threshing operations. Wheat about 85% harvested with considerable variation in quality. Rains have improved range conditions. Livestock in good to excellent condition.

(Cont'd on Page 3.)

JUDITH BASIN: Precipitation slight and scattered, temperatures moderate, possibly frost in some areas. Harvesting well along with ten days required to complete most of combining and binding. Threshing shocked grain will continue somewhat longer. Yields excellent. Soil moisture normal. Fall wheat seeding has good start. All livestock in excellent condition with no shipments to market as yet. Some cattle being shipped in to feed. Labor balanced.

LAKE: Heavy rains over entire county last of week. Temperatures dropped to near freezing. No frost reported. Some snow has fallen on high ranges. Threshing of grain near completion. Bean harvest completed with very low yields. Harvesting of red clover and alfalfa seed in full swing. Fall grain being seeded. Sugar beets making good growth. Livestock in good condition.

LEWIS & CLARK - BROADWATER: Rain fell generally over area, but probably caused more delay in harvesting operations than it did good. Threshing well advanced. Yields continuing higher than for several years. Lower protein content in wheat. Considerable wheat being stored. Hay crop unusually good and ranchers are harvesting all they can to build up feed reserve. Very little stock moving to market to date. Few lambs have been sold.

MADISON - JEFFERSON: Few scattered local showers, weather cool and somewhat threatening. Rains delayed haying and threshing slightly. Harvesting approximately half completed. Most of peas threshed with quite large acreage of grain still to be cut. Early potato crop only fair with late potatoes promising yields slightly below average. Few hoppers noticed in vicinity of Twin Bridges where they have not been present previously. Livestock in very good condition with abundance of grass on ranges. Sheepmen starting to move lambs to eastern markets. At least 18 cars have moved already.

MEAGHER: One light shower. Weather much colder than last week. Growing season about ended. Grain ripening well. Good progress on harvesting and threshing. Second cutting alfalfa about half stacked. Range in good condition. Livestock in excellent condition. Some country buying. Mixed lambs at about 7¢. Sleeping sickness in horses receding. No excess labor supply.

MISSOULA: Cool and cloudy most of week, several small showers totalling about .25 inch moisture. Some light frost reported, but no damage. Rain delayed threshing, which is about 75% completed. Excellent growing conditions for sugar beets. Potatoes doing well. Fair to good yields expected. Still some second and third crop hay to cut. Early apples coming on market. Prospect for good yield of all kinds of apples. Ranges and pastures generally in good condition. Livestock in good condition.

MUSSELSHELL - GOLDEN VALLEY: Cooler temperatures. Quite foggy Wednesday and Thursday mornings, general rains Friday morning. Harvesting nearly completed. Some stacked grain not yet threshed. Winter wheat seeding started. Livestock in good condition. Few cars shipped to easter markets.

PARK: Cool weather, no killing frost. Harvesting and threshing in full swing. Second crop alfalfa mostly in stack. 20 to 25 bushels per acre yields reported on dry land spring wheat, with 35 to 40 on winter wheat. Livestock in excellent condition, some shipments to market. Labor balanced.

PHILLIPS: Heavy rain throughout county, local precipitation 2.81 inches. No frost reported. Harvesting practically completed. Final harvesting operations delayed because of rain. Preparations being made for sugar beet harvest.

(Cont'd on Page 4.)

Some damage reported to potatoes from purple top. Livestock condition good. Labor balanced.

PONDERA: Cool, cloudy, frequent showers, two hail storms. Severe hail on Monday damaged mustard 85% to 100%, and standing wheat 25% to 85%. Another hail Tuesday night extended over large area of dryland wheat still standing, causing damage of 25% to 65%. Summer fallow wheat maintaining average of approximately 40 bushels in vicinity of Conrad and Valier. Yields holding up to 40 bushels on better types of soils in vicinity of Brady. Considerable damage to sugar beet foliage by hail. Material growth made in past 30 days due to good growing conditions for beets. Tonnage average estimated at ten tons on entire 3500 acres planted. Considerable sleeping sickness in horses experienced, and vaccination began in earnest on North Bench. Mortality rates will probably not exceed 15%. Most of death losses seem to occur in aged horses. Little or no livestock movement with exception of five cars of lambs out of Browning. Surplus of labor.

PRAIRIE: Weather cool, cloudy, more than an inch of precipitation, filling reservoirs and water holes. Crops nearly all harvested with disappointing yields. Precipitation which fell this week is stimulating planting of winter wheat. Livestock in good condition. No reports of sleeping sickness among horses this week.

ROOSEVELT: General precipitation and overcast most of week. Lower temperatures. Rain improving fall moisture conditions considerably. Threshing practically completed before rain. As previously reported, many late fields not cut and later grain threshed will hardly pay expenses. Harvesting of feed crops delayed because of rain. Fall moisture expected to increase seeding of crested wheatgrass. Feed supplies plentiful with livestock scarce. Some demand for restocking but most growers need financial assistance.

ROSEBUD: General showers throughout week. Topsoil moisture excellent for winter wheat planting. Corn slow in maturing because of cool, rainy weather. Sugar beet crop spotted, ranging from fair to excellent. Little activity as yet in livestock shipments. Outbreak of hog flu reported last week along Treasure County line has been diagnosed as cholera. Five small herds effected with about 50% loss to date.

SANDERS: Precipitation .88 inch. Cool, damp weather, growing conditions good. Average maximum temperature 73, minimum 45. Threshing completed in most of county. Harvesting of seed well under way. Livestock in good condition, some marketing. Labor balanced.

SHERIDAN: Scattered showers throughout county. Most threshing completed. No killing frosts to date. Yields of corn decreased considerably by grasshopper damage. Harvest of corn will begin as soon as weather conditions permit. Limited demand for feeder stock and milk cows. Surplus of labor.

SWEETGRASS: Weather ideal for completing harvest and cutting alfalfa. No precipitation. All grains in shock. Threshing under way throughout county, with heavy yields. No frosts reported as yet. Livestock in good condition. Fewer new cases of sleeping sickness reported.

TETON: Precipitation .54 inch. Nights very cool. Very little combining, due to damp weather. Farmers in Farmington and Pendroy areas commencing to worry about balance of harvest, probably over 50% left. Winter wheat seeding commencing in eastern part of county, this coming week. Indications are for considerable increase in winter wheat seeding. Moisture conditions better than a year ago. Indications are that purple top has caused serious loss to potato growers. Wild

(Cont'd on Page 5.)

haying practically completed, with little larger than normal crop. Undoubtedly will be considerable regrassing of abandoned farm land with crested wheatgrass this fall, due to improved moisture conditions and cheapness of the seed. Ranges in excellent condition and livestock in good condition. Needle Grass causing sheepmen some trouble.

TOOLE: Light to heavy rains with some hail throughout entire county. Hail damaged probably 1000 acres. Very little harvesting. Around 35% still to be harvested. Warm, dry weather would be helpful. Cattle and livestock in excellent condition. Grass and water very good.

VALLEY: Latter part of week hot and dry. General rain throughout country fore part and middle of week. Some farmers making plans for seeding small acreage of winter wheat. Haying completed. Small grain harvest completed. Harvesting of corn just starting. Beet harvest expected to start within next week. Range in good condition. Practically no cattle or sheep being sold. Some restocking of sheep being done. Quite a demand for milk cows past two weeks. No demand for labor.

WHEATLAND: Light rain first of week. Weather considerably cooler than last week. Threshing of spring wheat started. Livestock men who have summered their sheep in mountains are moving back to valley for wintering.

WIBAUX: Weather cool and rainy. Precipitation northern end of county 1.56, Wibaux 2.02, southern end 4.4. Some fall plowing will be done since rain. Farmers also planting an acreage of winter wheat and winter rye. Corn harvest commencing. Yield will be reduced materially due to grasshopper damage. No recent cases of sleeping sickness of horses reported. Estimated loss of 50% of horses affected. Livestock in good condition. Sheep doing well on stubble fields.

YELLOWSTONE: Precipitation .42 inch. Warm days, cool nights, no frost reported. Severe hail storms Monday and Thursday afternoons west of Billings. Local showers. Beets, beans, and hay damaged considerably in area about 4 miles wide and 8 miles long. Beet campaign to start last of month. Livestock in good condition. Feed supplies best in years. Some shortage of available farm labor.

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Jay G. Diamond, Sr. Agricultural Statistician
T. J. Kuzelka, Jr. Agricultural Statistician

Helena, Montana,
September 13, 1938.

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics — Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 20, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

Summerlike temperatures with only a trace of precipitation were general over the State during the week ending September 20th, when again the growing season added another week to its length by the absence of killing frosts. Rapid strides were made toward completing harvest and threshing of grain crops while such row crops as corn, potatoes and sugar beets matured rapidly.

In the major wheat counties for most part harvest of small grains is now largely completed. Threshing likewise has advanced with only scattered fields of shocked grains remaining to be threshed. In a few late counties, including Glacier, Gallatin, Meagher and Wheatland, late harvests of grain crops continue. While the week was dry, moisture from earlier rains maintained a good condition of soils for fall seeding operations, except in extreme northwestern Montana, where subsoils continue dry due to earlier moisture deficiencies. Fall seeding of winter wheat and rye, elsewhere, have made excellent progress to date.

Third cuttings of alfalfa are now being stacked in many counties east of the Continental Divide. In extreme southwestern Montana, harvesting of the second crop is now being completed. Otherwise, the big state hay crop is in the stack insuring the best winter feed supply for livestock in many years. Absence of frosts to date has been favorable for all late crops, especially corn, potatoes and flax, which are now maturing rapidly. Some potatoes have already been dug, while harvest of corn, mostly for fodder, is becoming general in the eastern counties. The bean harvest has been underway in the important southcentral counties for the past two weeks, where much of the crop is now being threshed. While sugar beet harvest started during the week in Blaine County, it is not expected to get generally underway in the State until October first.

Grasshoppers are reported to be dying in Daniels County, but from Gallatin and Fergus Counties they have been found eating newly germinated winter wheat fields, necessitating poisoning.

Fall marketings have started in case of both cattle and sheep, with shipments running well below those of recent years. Considerable cattle and sheep are still on summer ranges. Early deliveries of lambs are showing weights above average, in southeastern Montana. A few deliveries have been made at other points along the Yellowstone Valley. Along with the usual feeder inquiries for lambs at this season, there is also some demand for ewe lambs for restocking purposes. Sleeping sickness, continues to be reported from Beaverhead County, is declining in Lewis and Clark, Broadwater, Prairie, Stillwater, and Meagher Counties, and is not mentioned in other counties reporting for the week.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING SEPT. 20, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Total Precipitation This Week	From April 1st to date	For Corresponding Period in 1937	
Billings	92	44	*	0.00	13.52	7.79	
Bozeman	86	42	*	0.00	11.14	10.77	
Conrad	*	*	*	0.00	10.21	9.14	
Cut Bank	90	37	*	0.00	11.30	8.46	
Fort Peck	88	41	*	0.00	9.28	4.35	
Glendive	90	37	*	0.00	8.85	6.98	
Great Falls	91	45	*	0.00	11.90	6.25	
Havre	90	44	100	0.00	11.49	8.10	
HELENA	86	48	96	T	11.48	6.74	
Kalispell	86	48	100	0.00	5.94	6.35	
Lewistown	92	37	*	0.00	12.80	7.87	
Malta	89	42	*	0.00	12.23	6.79	
Miles City	92	48	94	0.00	8.01	6.84	
Missoula	92	48	98	0.00	8.31	3.93	
Poplar	89	35	*	0.00	11.43	5.33	*No Data.
Stanford	*	*	*	0.00	14.04	8.21	
Average	--	--	--	T	10.75	7.12	

W. E. Maughan, Weather Bureau. Jay G. Diamond, Bur. of Agri. Economics.

Series - 1938 - No. 25

The following summaries of crop conditions for the week ending September 17, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: No precipitation, light frosts in upper valleys, no frost in Beaverhead Valley. Harvesting of second crop alfalfa, grains and peas continuing. Yields still holding fair to good. No lambs shipped. Very few sales. Cattle in very good condition. Some lambs lighter than last year. Sleeping sickness in horses still prevails, many horses have been vaccinated.

BIG HORN: No precipitation. Weather warm during day, cold nights. Growing conditions for maturing of crops have been ideal. Moisture conditions are good. Winter wheat seeding general. Lot of early fall plowing being done. Corn and beans being harvested and beets making good progress for the harvest which will begin about October 1st. Range in good condition, also cattle, a few of which were marketed during past week.

BLAINE: Clear, sunshiny days, normal temperatures. No precipitation. Harvesting of small grains being completed since rains of last week. Sugar beet harvesting started September 15th. Growers limited on delivery. Satisfactory yields being reported. Livestock and range in excellent condition. No movement of livestock to market as yet.

CARBON: No precipitation. Cooler nights. Threshing of beans well along toward completion. Good yields being reported in both garden varieties and northern beans. Reported yields in northern varieties from 20 to 30 sacks per acre. Many benas recently sold at $1.65 per hundred. Threshing of grain continues in west portion. Third cutting alfalfa being harvested. Corn harvest well started over entire county where corn binders are used. A few wheat loans being made. Sugar beet crop looking well, though considerable amount of curly top reported. Digging of potatoes thus far shows that purple top has left very poor crop of salable tubers. Stock in fine shape. People looking around for feeder sheep and cattle. With more feed available a good many are interested in livestock feeding.

CHOUTEAU: Rains past week have brightened prospects for fall wheat seeding. Ideal growing weather. Fall seeding of wheat 60% to 70% completed. Moisture has speeded growth so that many fields are showing good growth. Harvest completed in general. Some corn being harvested, especially for seed purposes. Fall seeding of crested wheatgrass will be under way soon. Some demand for shoats for fattening purposes. Good supply of cheap rye and other feeds should help in replenishing livestock population in county. Labor situation unchanged. Farmers spreading poisoned bait to prevent grasshoppers from injuring tender winter wheat.

CUSTER - POWDER RIVER: Fair and warmer than previous week, no precipitation. Third crop of alfalfa going in stack. Some alfalfa seed cut in south country but yields and total volume will be light. Beets making good growth with water supply ample. Recent showers freshened water holes and filled reservoirs on ranges. First deliveries of lambs this week with weights above average. Heaviest expected shipments of cattle out of Miles City Thursday, but volume very light compared to former years. All classes of stuff in excellent condition.

DANIELS: No precipitation. Weather generally clearer and warmer than week previous. No heavy frosts reported to date. Weather ideal for maturing of corn and late garden crops. Harvesting completed except for stationary threshing of grains cut with binders and headers. Only enough wheat being sold to meet immediate financing needs. Rather high percentage of grasshoppers are dying, but believed that large numbers of eggs have been deposited. Livestock situation same as previously reported.

DAWSON: Nice fall weather prevailed. Threshing of small grains nearing completion. Corn harvesting well along with large amount of fodder and considerable grain feed produced. Rather heavier than usual seeding of winter wheat being made, although total acreage is comparatively small. Livestock conditions largely remained unchanged, with very little activity in lamb market and not many cattle moving to market.

FALLON - CARTER: Precipitation .20 inch. General growing conditions good, Favorable for winter wheat seeding. Corn harvest under way. Livestock condition fairly good.

(Cont'd on Page 2.)

FERGUS: Good harvesting weather, and harvesting practically through in all sections except for shocked grain and probably half of that has been threshed. Seeding well under way. Some fields where sufficient moisture is available beginning to show green. Some poisoning necessary to keep hoppers from taking wheat along edge of new seeded fields. Little livestock being shipped out. Quite a lot of sheep being sold by dealers for restocking purposes. Feed and water sufficient.

FLATHEAD: Warm and sunshiny days throughout week. Dry throughout county with subsoil moisture very deficient in all fields, including summer fallow. Some winter wheat being planted but most people holding off for rain and many decided against planting winter wheat. Most of threshing and combining will be completed in another week. High percentage of all crops being held in storage on the farm. Poor prospects for potato crop. Apple crop in the few orchards in Flathead County are much below production of last year.

GALLATIN: Rather uniformly warm, clear and no wind. Ideal harvest weather. Harvest continues with combining practically complete as well as cutting of small grains. Threshing still principal harvest activity. Winter wheat seeding continues, and uniform germination has resulted from earlier seedings. In west portion of county, winter wheat being eaten by grasshoppers and poisoning has been resumed in this area.

GARFIELD -PETROLEUM: General rain over both counties at beginning of period improving general moisture condition and improving range grass conditions particularly. Warmer days at end of period. No frost reported as yet. Threshing held up during rainy season and advancement of harvesting is as previously reported. In several areas where good local showers were received before general rain, moisture is considered adequate for seeding fall crops. Fall seeding of winter wheat getting under way. Livestock condition unchanged. Prospects for fall grass good. Very scattered movement of cattle out to market. Very limited exchange of livestock within the area continues. Some sheep from outside areas being brought into counties by local operators. Hogs scarce.

GLACIER: No rain, weather ideal for harvesting. No frosts reported. Harvesting in full swing. Exceptionally good yields being reported. Many farmers now seeding winter wheat. Fall grass showing very good growth. Cattle and lamb buyers active in western part of county.

HILL: No precipitation. 90% of all grain cut and threshed. Ranges in good condition. Livestock in excellent condition. Labor balanced.

JUDITH BASIN: No precipitation, temperatures moderate. Winter wheat seeding about 40% completed. Soil moisture in summer fallow good. In stubble very little moisture. Most crops have been combined or are in the shock. Harvesting should be practically completed by end of September. Yields running from 10 to 40 bushels in western part of county, and 8 to 25 bushels in eastern portion. Shipments of livestock to market started and some stock being shipped in to feed. Winter range conditions excellent and hay and rough feed still being put up on ranches.

LAKE: Cool nights, warm days. No frost or precipitation. Fall seeding of grains in full swing. Harvesting of third crop alfalfa being completed. Sugar beets making good growth. Livestock in good condition. Some cattle being shipped to market. Recent rains improved ranges and pastures.

LEWIS & CLARK - BROADWATER: Warm for this season, benefitting harvesting operations and maturing of late crops. Sugar beet harvest will start week of September 26th. Considerably higher yields than last year are expected. Potatoes will yield poorly because of seasonal weather factors and disease. Second cutting of hay mostly in stack. Threshing moving along swiftly. All stock in good shape. Sleeping sickness in horses is waning.

MEAGHER: No precipitation. No hard freezes. Threshing in full swing. One 33 bushel yield of winter rye reported. One dryland field of spring wheat reported at 13 bushels. Second cutting alfalfa about harvested. Haying operations nearly ended. Livestock condition excellent. Local lamb buyers report their market off from 7¢ to 6¼¢ on mixed lambs. Local cattle sales about steady. Sleeping sickness epidemic over. Total insect damage for year light, including crickets, grasshoppers, blister beetles, and webworms; due largely to favorable crop year.

(Cont'd on Page 3.)

MISSOULA: Warm days, cool nights. Excellent harvest weather. No precipitation; no frost. Threshing of small grains 85% to 90% completed. Yields fair to good. Some hay yet to be cut and stacked. Potatoes and sugar beets making good growth. Early apples ready for market. Late apples indicated better than average yield. Top soil and subsoil dry. Very little winter wheat seeded to date. Ranges and pastures still in good condition considering the season of the year. Livestock in good condition.

PARK: Good harvest weather prevailing. Cool nights with slight forst damage in higher areas reported. Seeded winter grain doing well. Threshing and combining about one-third completed. High yields reported on both dryland and irrigated grains. Livestock in excellent condition all over county as result of best grass in years. Grass pretty well cured and some movements of livestock to market.

PHILLIPS: No precipitation. Warm sunny days, cool nights. No frost reported to date. Harvesting practicallycompleted, with few jobs left in valley. Sugar beet harvest to start in next few days. Damage to potatoes from purple top apparent through most of county. Alfalfa and bluejoint hay plentiful. Livestock in good condition. Range excellent.

PONDERA: Hot and dry, no precipitation. Wheat harvest progressing rapidly, and combining should be fairly well completed within another week. Considerable shock threshing will be left, including some feed grains. Wheat receipts in Conrad averaging 50,000 bushels daily. Total wheat delivered and shipped will reach approximately 1,500,000 bushels. Close to 6,000 or 7,000 bushels being stored in bins and appears that approximately 75% of wheat is in. Heavy production of feed crops indicated by preliminary reports. Large tonnage of hay and straw piles will be available for winter. Prairie pastures showing heaviest stand of grass, according to old timers, that they have seen since 1905. Livestock numbers depopulated during dry years chiefly on account of lack of water and summer range, except sheep numbers which are holding up fairly well.

PRAIRIE: No precipitation. Weather satisfactory for ripening corn and forage crops. Crop conditions show more moisture in soil than for past five years. As result, farmers are sowing considerable acreage of winter wheat and crested wheatgrass. Livestock in good condition. Fall shipments of cattle started and lambs will begin moving before end of month. Sleeping sickness in horses has abated.

ROSEBUD: Warm weather throughout week. Late corn crop maturing rapidly. Corn mostly beyond danger of frost. Third cutting alfalfa being cut. Light crop of alfalfa seed being harvested. Winter wheat seeding under way with favorable moisture conditions. Few small shipments of cattle made during week. Little activity in lambs. No new cases of hog cholera reported.

SANDERS: No precipitation. Warm days, cool nights. Threshing completed, average yields. Alfalfa seed threshing in Lonepine area under way, about average yields. Egg survey shows prospect of heavy infestation of hoppers and crickets probably in 1939. All livestock in good conditon. Some lambs shipped and some cattle.

STILLWATER: Clear, no precipitation, no excessively warm days. Ideal for harvesting and growth of crops such as sugar beets. Threshing of grains still under way with peak of harvesting operations past. Dryland sections showing very good yields but in most cases protein is less than for a number of years. Second cutting alfalfa practically all up with third cutting in prospect. Bean harvest under way with fair yields reported. Seeding of winter wheat in full swing with moisture conditions favorable. Livestock in good condition with larger movement to market past week. Cattle price holding up well. Some movement of lambs that were contracted earlier in the year. Calves heavier in weight than last year. Decrease in cases of sleeping sickness of horses.

SWEETGRASS: Weather clear and warm. Cool nights, near frosts. No precipitation. 70% of threshing complete. Second cutting alfalfa being harvested. Livestock in good condition and coming out of summer ranges. Lambs under contract being delivered. Labor situation unchanged.

(Cont'd on Page 4)

TOOLE: Warm, ideal weather for harvesting. 85% to 90% of harvesting is done. Practically all should be finished by next week if weather conditions continue. Crops in northern part of county later than usual and delays have taken place due to this fact. Water and grass excellent. Feed supplies largest in many years. No market movement to market as yet.

VALLEY: Dryland harvesting practically completed. Sugar beet harvest just starting. Friday and Saturday of last week cloudy, cool and considerable rainfall throughout county. 1.75 inch rainfall at Glasgow. Sunday and Monday cool with light winds but clear. Balance of week characterized by warm weather. No frost reported to date. No movement of livestock.

WHEATLAND: No precipitation. Weather considerably warmer than preceding week, although nights quite cool. Threshing of spring wheat well under way.

WIBAUX: No precipitation. Growing conditions good for corn. Some winter wheat being seeded. Moisture conditions good in south half of county and extreme northern part, fair in other parts of county. Condition of range good. Restocking is a problem. Livestock in very good condition, but very few will be marketed. Saveral bands of sheep have come in to feed on grasshopper damaged wheat fields and are doing well.

YELLOWSTONE: Trace of precipitation. Warm days, cool nights, no frost reported. Beet harvest starts September 26th. Beets in good shape, and beans practically all harvested. Considerable winter wheat seeded. Consideralbe fall plowing has been done. Livestock in goodcondition. Feed supplies best in years.

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Jay G. Diamond, Sr. Agr. Statistician.
T. J. Kuzelka, Jr. Agr. Statistician.

Helena, Montana,
September 20, 1938.

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics ——Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 27, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

Dry and unseasonably warm weather prevailed during the week ending Tuesday, September 27th. Day temperatures during the first half of the week exceeded 90° at most of the reporting stations, and were generally the highest on record to occur so late in the season. Highest readings for the week of 97° were recorded at Glendive and Poplar on the 22nd. Night temperatures were again sufficiently high for warding off damaging frosts and prolonging the growing season well beyond the usual time of killing frosts. The average date of the first killing frosts in Montana ranges between September 12th and 20th. No rain of any consequence fell during the week, nor has fallen in the State since the 10th of the month.

The prolonged growing season has been favorable to continued development of corn, sugar beets, and vegetable gardens. Harvesting of all grain crops is completed except for some late wheat in Glacier and Toole Counties. Reported wheat yields in the late producing areas continue up to expectations. Third cutting of good quality alfalfa hay is completed. Some increase in alfalfa seed and red clover seed acreages is reported from the northwest area. Yields of legume and grass seeds are generally good, and yields of mustard seed are above average. Threshing of beans in the Yellowstone Valley was nearly completed by the end of the week. Digging of sugar beets is underway in Phillips and Valley Counties and digging in all important beet areas will begin the last week in September. The longer growing season was especially favorable to the beet crop, which was reported as gaining slightly in tonnage. Potato yields in some non-commercial areas are somewhat disappointing. In commercial areas potato digging has been hampered by vines not being frosted down. The warm weather has promoted normal development of the above average corn crop, much of which is being snapped and cut for fodder. Seeding of winter wheat was underway in all areas. Dry soil conditions in the northwest area have curtailed seedings, but in other sections moisture conditions are fair to good. Early seeded fall wheat is making a good start but some grasshopper damage to edges of fields is reported. Seeding of all rye and crested wheatgrass is also underway.

The cattle market movement has reached the peak in southeastern areas but in other areas movement has been delayed due to the prevailing good feed conditions. Range lambs moved to date have been reported above normal in weight, but movement has also been slow. Ample livestock feeds of hay and grain exist in all parts of the State. Sleeping sickness in horses has been less serious during the past week.

This is the 26th issue of the 1938 series of "Weather and Crop Conditions Reports". As the growing season is practically over, this will be the final report for this year. Publication of these reports will again be resumed early in April of 1939.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING SEPT. 27, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Total Precipitation This Week	Total Precipitation From April 1st To Date	Total Precipitation For Corresponding Period in 1937
Billings	91	47	*	0.00	13.52	8.86
Bozeman	85	40	*	T	11.14	11.80
Conrad	*	*	*	0.00	10.21	9.25
Cut Bank	87	37	*	T	11.30	8.48
Fort Peck	91	46	*	0.00	9.28	5.19
Glendive	97	42	*	T	8.85	7.20
Great Falls	91	46	*	T	11.90	6.50
Havre	92	48	96	0.02	11.51	8.50
HELENA	85	46	91	0.01	11.49	7.29
Kalispell	84	44	94	T	5.94	6.56
Lewistown	92	34	*	0.00	12.80	8.29
Malta	91	42	*	0.00	12.23	8.13
Miles City	94	48	94	0.00	8.01	7.43
Missoula	92	42	94	0.00	8.31	4.31
Poplar	97	41	*	0.00	11.43	6.07
Stanford	*	*	*	0.00	14.04	8.70
AVERAGE	--	--	--	T	10.75	7.66

*No Data.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bur. of Agr. Economics.

Series - 1938 - No. 26
Helena, Montana
September 28, 1938

The following summaries of crop conditions for the week ending September 24, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: No precipitation, weather warmer. Harvesting alfalfa, grains and peas continuing. Potato digging hampered by vines not being frosted down. Lamb deliveries being made, a few sales reported the past week. Lamb weights reported the past week slightly heavier. Some cattle sales reported. All livestock in good condition. Sleeping sickness in horses on decline.

BIG HORN: No precipitation, weather warm and dry. Temperature above normal for this season. No killing frost. Late crops ripening in splendid shape. Beets making good progress. Corn maturing, with good yield reported. Beans and other crops harvested. Potato crop short due to curley top. Winter wheat seeding going on. Range in good condition. Grass ripening; cattle putting on more fat. Labor ample.

CARBON: Temperature in Belfry area ranged from 48° to 86°, no rain. Weather very warm. Wheat threshing completed. Beans practically threshed with exception of few late patches. Winter wheat seeding 90% completed on dry land. Early seeding up in good shape. Fall plowing beginning. Sugar beet harvest will begin 27th of September, with some sections at a later date on account of curly top infestation and it is expected that by allowing these fields to remain a week or so longer, it will add tonnage to their yield. Livestock conditions very good.

CASCADE: Seasonably warm weather, ideal ripening and harvesting conditions. No killing frost. Wheat about 85% harvested, that remaining being on small farms where binding is practiced. Potato crop appears to be about a 75% failure. Sugar beet harvest will start first of next week. Livestock in excellent condition, surplus of feed.

CHOUTEAU: Temperature reached 97° on Monday, highest for 1938. Above normal entire week. Winter wheat making rapid growth in most areas, some however are lacking moisture to start seed. Seeding of winter wheat has increased over county due to favorable weather conditions. Supplies of roughage and feed grains ample for all livestock. Storage of feed to prevent loss from rodents, expecially mice, is serious problem insome areas. More feeder stock, than a year ago, will be fattened before marketing. Grasshoppers damaging winter wheat along edges of fields and poisoning program under way. Sap bugs seem to be especially thick this year in some areas.

CUSTER - POWDER RIVER: Fair and unusually warm for this season. Little variation in temperatures. Stacking of third crop alfalfa to be finished this week. Corn and other late forage crops being cut before frost. Sugar beets continuing good growth, with plenty of water for final irrigation. Potato yields short with many small sizes due to purple top damage. Shipment of stock to market continues. Peak of cattle run, over. Lamb deliveries to reach peak within next two weeks. All range stock in excellent condition.

DANIELS: No precipitation. Weather unusually warm for season. Light frosts reported in some localities. Some seeding of winter wheat, fall rye, and crested wheatgrass under way. Threshing of grains not harvested with combine practically finished. Harvesting of late feed crops including corn also nearly completed. Fall hatching of grasshoppers reported in some areas of county. Some demand for stockers due to abundant feed supply. No outside marketing of stock expected.

DAWSON: Frosts cut down most tender vegetables early in week over most of county, missed odd sections. Unseasonably warm days. Hopper damaged stubble showing green from volunteer growth, and weeds. Harvesting practically completed, with considerable amounts of corn being snapped. Wild hay still going into stack, total quantity in area this year large. Crested wheatgrass seed being cleaned. Some hatching of hoppers during warm weather. Effect apparently negligible.

FALLON - CARTER: No precipitation. Days very warm, cool nights. No general frost, as yet. Farmers busy putting in winter wheat. Threshing, delayed by rains, is being completed. Livestock in very good condition.

(Cont'd on Page 2.)

FERGUS: Wheat harvest practically complete in all parts. Seeding of winter wheat well under way with many farmers finishing during week. Interest high on crop loans. Still hopes for adjustments on basis of high protein wheat. As a result, much wheat stored on farms and in elevators. Very little sold, except for immediate cash needs. Some stock being shipped and some going to Great Falls and Billings for sale. Only small fraction shipped compared with recent years. All classes in good condition. Water and feed abundant.

FLATHEAD: Weather unusually warm for season, moisture reserve very low. Farmers holding back on seeding winter wheat through Lower Valley and Creston, with exception of a few who seeded winter wheat about two weeks ago following general rain throughout county. This wheat coming up in good shape, but more rain is needed. Potato crop will be very short. Crested wheatgrass about average, while yield per acre on alfalfa has been very low. Acreage of alfalfa left for seed has been increased very materially. Good supply of sweet clover seed in valley. Condition of livestock good, but ranchers report few sales. Labor adequate.

GALLATIN: Continued warm, partly cloudy latter part of week. Grain harvest continues. Small amounts of water turned insome ditches, this being used on alfalfa and pastures where available. Seeding of winter wheat continues.

GARFIELD - PETROLEUM: No precipitation. Warm days, cool nights. Harvesting of small grains almost complete. Recent moisture has increased winter wheat seedings and makes them appear favorable. Livestock conditions continue very good. Fall range and pasture conditions improved by recent precipitation. Some demand for hogs reported.

GLACIER: Slight shower last of week, delaying harvesting. Generally warm all week with cooler weather last of week. Most of winter wheat seeded, and early seedings showing up. Harvesting continues, possibly 65% completed. Haying finished. Survey of hopper eggs shows heavy infestation in few local spots. Large numbers of black field crickets showing up. Livestock in first-class condition.

HILL: No precipitation. Ideal weather for harvesting and threshing operations. 95% of grain harvested and threshed. No killing frosts to date. Ranges in excellent condition. Very little damage experienced from crickets past season, and egg survey shows very light infestation for coming year. Grasshopper damage was light but migration into county latter part of season has shown rather heavy egg infestation in east one-third of county. Livestock in good condition. Cattle in very good shape. 35 cars of cattle shipped, and no sheep have moved at present time. Labor balanced.

JUDITH BASIN: No precipitation. Temperature moderate. Growing conditions excellent. Soil moisture fair in fallow and poor in stubble. Fall wheat seeding about 75% done. Grasshoppers doing damage to fall wheat. Livestock in excellent condition. Shipment to market last Tuesday. Feed conditions excellent. Labor balanced.

LAKE: Clear sunshiny days, normal temperature. No precipitation. Third crop alfalfa going into stack. Yields of red clover and alfalfa seed higher than normal with reported yields of red clover seed greater than 600 lbs. per acre. Harvesting of beets will start Sept. 26th in some communities. Grasshopper and cricket egg survey indicates heavy infestations in 1939. Ranges and pastures in good condition considering season of year. Livestock in good condition. Surplus of labor.

MADISON - JEFFERSON: Warm and dry throughout week, very little wind. No precipitation. Harvesting progressed rapidly during week. Practically all peas threshed in Ruby Valley with grain run just getting well under way and very good yields being reported. Other areas are further along. Potato harvest continued on increased scale with many yields very low and of poor quality. A few calves contracted at 7 cents. Very few lambs being sold. Average weight of lambs in many cases will be highest in years.

MEAGHER: No precipitation. No killing frosts. Growing season at end. Gardens and late grains benefitting from lack of frost. Threshing approaching

(Cont'd on Page 3.)

completion. Good to excellent yields reported in all grain crops. Haying completed. Flies still bothering livestock, otherwise insect season at a close. Market movement of livestock at seasonal peak. Little local buying. No seasonal excess of labor above demand.

MISSOULA: Dry, no precipitation. Above normal temperatures. Threshing about completed in all communities. Some hay still being put up. Winter wheat seeding begun although it is quite dry. Sugar beet harvest to start soon with high yields anticipated. Ranges in good condition. Some extra range available. Some demand for feeder steers. Labor balanced.

MUSSELSHELL - GOLDEN VALLEY: No precipitation. Temperature almost as high as at any time during summer. Moisture needed for winter wheat. Winter wheat seeding quite well under way. Corn ripening and curing very well. Threshing completed except in scattered local areas. Livestock in very good condition.

PARK: Warm weather for this time of year. Excellent harvesting conditions. Some late grain and garden crops damaged by earlier frosts. Forty bushel wheat and other grains of comparable yields reported all over county. Grasshoppers damaging winter wheat seedings. Very large supply of hay and other feed in county. Livestock shipped to market, have received good prices due to good weight and quality as result of abundance of feed. Harvesting employing all available laborers, but no shortage of men.

PHILLIPS: No precipitation. Temperature unseasonably high. No killing frost reported. Growing conditions for winter wheat and fall seeded grasses very favorable. Sugar beet digging under way. Reports so far indicate a yield of around 12 tons per acre. Recent grasshopper egg survey shows that egg laying was not general. Eastern and southeastern part of county show enough infestation to cause trouble next spring. Range and livestock condition good. Labor balanced.

PONDERA: Hot and dry except for two light showers. No frost except occasional touches in garden patches. All combining completed to approximately 95% completion. Shock threshing under way and approximately 50% completed. Sugar beet harvest will commence Sept. 26, beet workers being distributed end of this week. Ranges reseeding at high rate, especially western wheatgrass, gramma, tall sedges, and blue joint. Crested wheatgrass averaging 400 lbs. clean seed per acre. Seed supplies of this crop high, with some estimate of 50,000 lbs. available for sale. Beet workers and other labor well supplied.

PRAIRIE: No precipitation. Hot days cool nights. No frost as yet. Crops just about out of way for 1938 with exception of few late fields of corn. Grain crops were disappointing in yield due to effects of grasshoppers and rust. Feed crops abundant and large amounts of bluejoint hay stacked. Livestock in good condition, movement of lambs expected to start next week. Sleeping sickness in horses abating, but was severe during fly season, killing about 50 horses in county.

ROOSEVELT: No precipitation. Frost in few localities on 19th, killing gardens and corn. Days unseasonably warm. Harvest of cane and cron mostly completed. Some 35 to 40 bushel yields of corn reported from early fields not seriously damaged by hoppers, but most corn harvested for fodder. Some winter rye seeded and a considerably larger than normal acreage of winter wheat being seeded. Livestock continues in good condition with abundance of feed. Demand for cattle and some sheep for restocking general with supply scarce.

ROSEBUD: Weather unseasonably hot throughout week. Very favorable for development of sugar beets and late crorn and alfalfa seed. No killing frosts reported to date. Large percentage of winter wheat coming up to good stand. Additional moisture will be needed soon. Some alfalfa still being cut for seed. Reports indicate only fair to poor yields being obtained. Sugar beet harvest to start 26th. Several shipments of cattle during week. Some new activity in lamb contracts at slightly lower figures than earlier deals.

SANDERS: No precipitation. Average maximum temperature 93°, average minimum 47°. Sugar beets in east end of county about ready to harvest. Grasshoppers

(Cont'd on Page 4)

have done some damage to late alfalfa. Livestock in good condition. Ranges getting very dry.

SHERIDAN: Weather continues abnormally warm. No precipitation. Most harvesting and threshing completed. Yields disappointing in most instances. Grain which was cut off by grasshoppers is now growing. Rainfall would be of value to most parts of county. Surplus of feed available for livestock. Some demand for breeding and feeding stock. Surplus of labor still in existence.

SWEETGRASS: Weather warm and very dry. No precipitation. Pastures and ranges dry. Grasses breaking which reduced winter feed. Threshing of grain and second cutting alfalfa will all be completed in next week. Very little fall seeding on summer fallow has started. No fall plowing on irrigated land. Livestock in excellent shape. Contracted range lambs delivered at 79 to 89 pounds per head.

TETON: About one week ofcombining will complete western part of county. Threshing just getting under way in irrigated sections. Yields are up to expectations in most cases, running from 25 to 40, all of it being heavy wheat. Winter wheat seedings under way with larger than normal seeding this fall. Early winter wheat up in fine shape. Grasshoppers causing slight amount of damage around edges.

TOOLE: Excellent harvesting weather throughout county. Practically all crops harvested. Wheat yields averaged around 25 bushels for the county. Mustard yields were extremely high this year, some going as high as 1500 lbs. per acre. Average crop will be 900 to 1000 lbs. There is more barley and oats than has been in the county for many years, and feed and seed supplies are plentiful. No market movement to market at present time, of livestock. Ideal weather and plenty of feed and water, operators are no doubt holding back some. Peak for farm labor is over for the year.

VALLEY: No precipitation. Frost reported in northern portion of county in Richland-Glentana areas. Sugar beet harvest just starting. Hoppers practically all gone. Egg survey just completed showing very heavy infestation, particularly on stubble and idle ground.

WHEATLAND: Weather hot and dry all week, with a light local shower last of week. Nights very cool, but no frost reported. Harvesting of spring wheat still in full swing.

WIBAUX: No precipitation. Growing conditions goodfor corn. Grain threshing completed. Last grain threshed very poor quality due to sprouting in shocks as a result of heavy rains. Two cars of feeder cattle sold this week to feeder buyers. Cattle and sheep doing very well. Considerable increase in winter wheat and fall rye seedings. Moisture conditions good, and some fall plowing is being done.

YELLOWSTONE: No precipitation. Warm days, cool nights, no frost reported. Beet campaign starts the 26th. Beets in good shape. Small amount of curly top in western end of county. Most of bean harvesting done. Most third cutting hay up. Dryland areas seeding winter wheat. Some areas seeded early up in good shape. Livestock in good condition. Plenty of cheap feed and feed supplies. Some stock going into feed lots.

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Helena, Montana,
September 27, 1938.